## (New) ABSTRACT

A process for mask-free localized grafting of organic molecules capable of being electrically activated, onto a composite surface comprising conductive and/or semiconductive portions, by placing said organic molecules in contact with said composite surface, in which said grafting is performed electrochemically in a single step on chosen, defined areas of said conductive and/or semiconductive portions, said areas being brought to a potential higher than or equal to a threshold electrical potential determined relative to a reference electrode, said threshold electrical potential being the potential above which grafting of said organic molecules takes place.